STAT 107 Conditional Probability

A card is drawn from a fair poker deck. What is the probability that

- the card is red given the card is not a heart (♥)?
- the card is not a face card given the card is not an Ace?
- the card is a seven given the card is an odd numbered card?

A card is drawn from a fair poker deck. What is the probability that

- the card is a face card given the card is not a Queen?
- the card is numbered given the card is an even numbered card?
- the card is a face card given the card is not a numbered card?

Two cards are drawn from a fair poker deck. What is the probability that

- the first card is a heart (♥) and the second card is a spade (♠)?
- the first card is a spade (*) and the second card is black?
- the first card is a spade and the second card is not a spade?

Five cards are drawn from a fair poker deck. What is the probability that

- all five cards are red?
- the first card is a heart (♥), the second card is a diamond (♦), the third card is a heart (♥), the fourth card is a diamond (♦) and the fifth card is red?

Five cards are drawn from a fair poker deck. What is the probability that

- all five cards have a unique suit?
- the first three cards are spades (♠) and the last two cards are clubs (♣)?
- all five cards are face cards?
- the first card is an even numbered card, the second card is an odd numbered card, the third card is a
 Jack, the fourth card is a face card, and the fifth card is lettered?
- the first card is a seven, the second card is an odd numbered card, and the third card is not an odd numbered card?